

## **Optical Instrumentation and Nde Branch (RIO)**

Conducts research in minimally-intrusive optical measurement systems and nondestructive evaluation science. Advances the state-of-the-art in optical instrumentation to provide new measurement capabilities for aerospace propulsion testing facilities, develops new optical components for aerospace flight, designs advanced electro-optic circuits for space exploration and develops nondestructive measurement systems for structural health monitoring and material characterization. Advanced data processing, micro-optics quantum sensing and nanoscale technologies are used and developed. Data from systems are used to help designers understand the fundamental physics of new systems and to validate computational models. Data leads to improved designs, increased safety and reduced design cycle times for many of the core technologies developed at GRC.

